We claim:

1. A large blow molding made from polyethylene of density $\rho \geq 0.94\ g/cm^3$ and of melt flow rate MFR 190/21.6 < 50 g/10 min, wherein the notched tensile impact strength a_{zK} (-30°C), measured in accordance with ISO 8256, is not less than 300 kJ/m^2 and the bursting strength, determined by a drop height test at -18°C is more than 3 m.

2. A large blow molding as claimed in claim 1, wherein the polyethylene has a weight-average molar mass M_w of from 200 to 800 kg/mol and a breadth of molar mass distribution M_w/M_n of from 5 to 80.

3. A large blow molding as claimed in claim 1 or 2, which is a canister, tank, drum or intermediate bulk container.

4. A large blow molding as claimed in claim 3 which is an L-ring drum.

5. A process for producing large blow moldings as claimed in claim 1, by using polyethylene of density $\rho \geq 0.94\ g/cm^3$, of melt flow rate MFR 190/21.6 < 50 g/10 min and of notched tensile impact strength a_{zK} (-30°C) not less than 250 kJ/m^2, forming the same at high temperatures to give a large blow molding, and allowing the large blow molding to cool to room temperature, which comprises, in a further step, annealing the large blow molding at from 60 to 135°C until the notched tensile impact strength a_{zK} (-30°C), measured in accordance with ISO 8256, is at least 300 kJ/m^2, and then cooling the same again to room temperature.

6. A process as claimed in claim 5, wherein the polyethylene used has a weight-average molar mass M_w of from 200 to 800 kg/mol and a breadth of molar mass distribution M_w/M_n of from 5 to 80.

7. A process as claimed in claim 5 or 6, wherein the large blow molding is formed by extrusion blow molding.

8. The use of the large blow moldings as claimed in any of claims 1 to 4 for storage or transport of hazardous materials.